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‘Thomas Cook’s Tourists’: the challenges and benefits of inter-service in the British
army of the First World War

William Tibbs, a former private in the 2/15th Battalion London Regiment, was proud to recall how his battalion was ‘called the [Thomas] Cook’s Tourists because of our many travels’.¹ Tibbs’ battalion had formed part of the 60th (2/2nd London) Division, which had seen service in three different operational theatres during the First World War: France, Salonika and Palestine. The 60th Division was not unique in this respect. Although the majority of the British army’s manpower remained on the Western Front – the principal theatre of operations – over a third of its combat formations saw service in another theatre. These formations not only represented the movement of bodies and *matériel*; they also reflected the movement of knowledge and expertise.²

The dominance of the Western Front, both at the time of the First World War and today, has coloured perceptions of the conflict. Prevalent images of the war include trenches, barbed wire, mud and shell-pocked terrain. These images have engendered the belief that physical mobility was non-existent during the war, that stillness was the norm. Soldiers are perceived as being spatially fixed to trenches or concrete emplacements. This perception of fixity is exacerbated by the dominance of artillery and machine guns, leading to the creation of a fire-swept zone. Frontal assaults were incredibly dangerous. The perception of immobility is given further credence by the lack of a truly mobile arm: the tank was in its infancy, and the cavalry, particularly on the Western Front, was rendered largely redundant.³ Senior commanders were thus confronted with the stark, interrelated problems of both strategic and tactical level immobility.

Yet, despite these perceptions, the First World War was very much a mobile war. However, it is a conflict whose im/mobilities have yet to be teased apart. Part of this comes down to the relational and contextual nature of mobilities. Certainly, in

comparison to future conflicts, particularly the high-intensity counterinsurgency operations of decolonisation, the First World War appears static. However, let us reflect on the experience of the soldier in the front line trench. The confined space and the immobilities associated with endless waiting leads to an assumption of fixity. Yet he is mobile.⁴ From his physical circulation behind the line up to the front, to his walking the trenches, to his going over the top, there is no absolute immobility to his existence. Indeed, as Peter Adey notes, everything is mobile, yet this largely comes down to differential and relational perspectives.⁵ The logistical infrastructure required for war provides us with another example of the dialectical – rather than dualistic – relationship between mobilities and relative immobilities. The sending of letters and parcels and the movement of men and *matériel* required kilometres of rail network infrastructure, both in the UK and abroad. While railheads are spatially fixed and the train itself is destined to spend all its time on the rails, the military's logistical needs were reliant on the complex mobilities within and beyond the railhead, which provided fuel, supplies and information.⁶ As Steven Gray demonstrates in his own article in this special issue, infrastructures, despite their veneer of permanence and stability, are precarious.⁷ They require constant support and maintenance. As Stephen Graham and Nigel Thrift suggest, infrastructural systems are often 'black boxed' with limited attempts to acknowledge their 'inherent and continuous unreliabilities'.⁸ Infrastructures in the case of the First World War are more than just railways and rolling stock working collectively; they are, instead, complex and mobile assemblages bringing together all manner of human, non-human and natural agents into a multitude of continuous connections across a geographic space.⁹

Although the physical movement of personnel and *matériel* during the war has received some attention, scholarship on the global movement of knowledge or ideas

about warfare during wartime has not been as well covered. In First World War scholarship, with the exception of medical and communication knowledge, the transfer of military knowledge is underdeveloped in the historiography. Where knowledge transfer or learning has been considered it is often restricted to studies on the Western Front. A similar gap exists in the ‘new mobilities’ literature. Studies on mobility have tended to focus on civilian or peacetime movements with a particular focus on the mobility of ‘peoples and things’.¹⁰ Although there is a burgeoning scholarship on imperial knowledge networks, research on the ‘mobility of ideas’ in a military context is less developed.¹¹

Like the movement of physical entities, the movement of knowledge and ideas can be constrained and regulated. Ideas are subject to friction and are sometimes forced to wait for receptive audiences. As Tim Cresswell argues, we need to pay attention not only to the process of stopping, but also to the kind of friction that mobility experiences.¹² This friction – whether it is human, geographical or organisational in nature – is important to our understanding of how ideas and knowledge move across various spaces and between different sites.¹³ For the military, the problem of friction is well known and best described by the military theorist Carl von Clausewitz. It is ‘the force that makes the apparently easy so difficult’.¹⁴ It comes in two forms: first, the physical difficulties of moving and fighting armies, and, secondly, the intangible factors relating to fear, danger and problems of information.¹⁵ Both physical and intangible factors played a role in hindering the flow of knowledge and expertise in wartime. Indeed, the First World War is the archetypal example of friction at play in war, shaping its specific character.

This article will examine the movement and integration of combat formations and commanders between the British army’s various operational theatres. By

considering physical movement, it will also examine the movement of knowledge. While such an approach suggests a distinction or separation between these two types of mobility, the two are invariably entwined. Warfare is very much a 'complex of mobilities'.¹⁶ Knowledge, for example, travelled in a number of different ways. It could be through the movement of personnel or formations, through material means, such as letters and military pamphlets, but also through embodied practices such as battle drills, marching and military customs, instilled through the training of bodies. Through these embodied practices, or the absence of such, we can see clear distinctions between the experiences and mobilities of regular soldiers and civilian volunteers, but also between distinct types of warfare in the different theatres.

The mobility of both military bodies and knowledge was intimately linked to the particular geographies of each operational theatre. These theatres were seen as both geographically distinct and distinctive sites, which were moved around and between in different ways. For industrialised theatres, such as the Western Front, an established railway network, supplemented by light railways, aided physical movement. Italy, while possessing its own railways and connected to the Western Front through an overland network, still relied on mule transport in its mountainous heights. For largely pre-industrial theatres such as East Africa, Mesopotamia and Palestine, there was a greater reliance on traditional mobilities including native porters, river transport or animal transport, prior to the establishment of railway networks.¹⁷ These infrastructures – perceived as relative sources of strength – were vulnerable and subject to pinch points that could rapidly become choke points. In late 1917, for example, the overland supply route between the Western Front and Italy was suspended due to Italian reversals. Prior to its closure, 380 deadweight tons of stores per day were carried over this route to theatres such as Salonika and Palestine.

However, during the period after the route reopened, this had reduced to an average of 184 tons.¹⁸

With these different mobilities and geographical distinctions in mind, this article addresses two questions: how successful was the movement of knowledge between operational theatres, and to what extent did the army as an institution help or hinder the movement of knowledge through the integration of combat formations? This article suggests that the First World War was a conflict in which the efficient mobilisation of knowledge was an important contributor to success. In essence, victory becomes more likely when militaries adapt faster and more effectively than their opponents. The article first identifies some of the challenges and barriers to mobility experienced by combat formations. Secondly, it will examine some of the methods used by the army to integrate formations into their new expeditionary forces, including both institutional and individual methods. Such methods were sophisticated and recognisably modern, resonating with contemporary notions of how complex institutions organise and integrate newcomers. Finally, it will look at some of the benefits associated with the inter-theatre movement of individuals and formations.

The British army was not the only belligerent concerned with the politics of the mobilities of knowledge, yet there is something of a historiographical lacuna where learning in other states is concerned. For the German army, there is some evidence to suggest that certain artillery methods and infantry tactics developed on the Eastern Front were transferred and applied on the Western Front in early 1918.¹⁹ However, we know little, for instance, of what the French army learned at Salonika and what, if anything, was transferred back to the Western Front. More research is certainly required here to establish how the mobilisation of knowledge mapped on to a broader pattern of learning.

BARRIERS TO MOBILITIES

When moving between theatres, combat formations had to negotiate a variety of physical barriers, such as changes in terrain and environment, as well as organisational barriers. These various factors often served to decelerate a formation's integration into its new expeditionary force. While environmental barriers were quickly overcome through a period of acclimatisation, less easy to overcome were those intangible, organisational barriers that related to institutional culture and snobbery.²⁰ These barriers could often hinder knowledge flows between formations and, with that, undermine a formation's potential combat effectiveness. A formation's 'class', its nationality and its service history could act as sources of friction, preventing, or at least impeding, the movement of knowledge. This friction was a two-way process: for the newcomer formations who were departing their old expeditionary forces, and for long-serving formations who had to work alongside these untested arrivals.

Formation 'Class'

The British army of the First World War was not a homogeneous force. Its composition changed throughout the war. In August 1914 it was a small, professional force, totalling 247,432 officers and men. However, at war's end in November 1918 its strength totalled 2,668,736 officers and men.²¹ It was no longer a professional army, but a mixture of different types of formations. A formation's 'class' – whether it was regular, territorial, Kitchener army, Indian army or dominion – influenced perceptions of its ability. Regular formations, for example, were held in high regard across the different theatres. They were often used to 'stiffen' unblooded formations,

or provide an exemplar to copy. Commenting on the poor performance of the 53rd (Welsh) Division, a territorial formation, during the Suvla operations at Gallipoli in August 1915, one general recalled how the division ‘showed no attacking spirit at all ... I really believed that if we had had one brigade of Regulars here to set an example ... [the] Territorials would have played up well within them’.²² This comment suggested that the will to attack came from training and experience – embodied practices that these volunteer formations lacked, owing to their civilian background, augmented only by rushed and partial training prior to the assault.

Although the ‘class barriers’ between formations broke down as the war progressed, a distinct prejudice remained against Kitchener army divisions, particularly during the early years of the war.²³ The Kitchener, or New Army, divisions were conceived as a way of rapidly expanding the army through the recruitment of wartime volunteers. Initially, men aged between nineteen and thirty were asked to enlist for general service ‘for a period of three years or until the war is concluded’.²⁴ These volunteers also had to agree to serve anywhere the army needed them. Recalling the experience of the August offensive at Gallipoli, Major-General Henry de Beauvoir de Lisle commented unfavourably on the performance of one of these Kitchener formations, the 10th (Irish) Division, noting that ‘none of ... their commanders, had had any previous experience of modern warfare, and to this, and this only, can I attribute their failure’.²⁵ General Sir Ian Hamilton, commander-in-chief of the Mediterranean Expeditionary Force [MEF], was less damning of the Kitchener army officers, writing that they were ‘perfectly splendid’, but they had still suffered ‘without any regulars to stiffen them’.²⁶ These class barriers were still in place by 1917, particularly in the subsidiary theatres. Upon hearing of the 10th Division’s move to Palestine in August 1917, one senior general wrote to a colleague

at the War Office to say that he was ‘glad to see that there are three regular battalions in it’.²⁷ This was, in large part, due to the perception that formations arriving from Salonika had ‘little fighting experience’ and the belief, in some quarters, that their fighting value was ‘greatly reduced’ as a result.²⁸

National Identity

The ‘class’ of certain formations also intersected with nascent national identities, particularly where Irish and dominion units were concerned. In some instances there were doubts as to the efficacy and reliability of these non-regular and, more importantly, non-English formations. Having recently had an ‘uppish’ draft of Norfolk Regiment officers attached to his battalion, one Irish officer seethed when he ‘overheard a few remarks about their “hard luck”’ in being attached to an Irish regiment.²⁹ The nationality of his unit was singled out once again when it was issued with a pamphlet on ‘how to behave to the people on whom we are billeted’.

Unsurprisingly aggrieved, he believed that ‘the compilers can never have been with an Irish battalion behind the lines. I daresay it is the same with the Scotch and English regiments, particularly the former’.³⁰ The officer’s remark about Scottish regiments is telling, revealing much about perceptions of Irish military culture. Scottish regiments were associated with an ancient martial tradition, typified by fortitude and bellicosity, but tempered by loyalty. In contrast, there was still some suspicion of the Irish – both implicit and explicit – on religious, racial and political grounds.³¹ For the Australians, on the other hand, it was their perceived indiscipline that proved both a longstanding trope and a perennial thorn in the side. One senior British commander remarked that ‘the Australians frankly terrify me. Their want of discipline is something awful’,

while another teased an Australian commander on his 'obstreperous' troops, commenting that 'they are rather a handful'.³²

The pervasiveness of these national stereotypes led to questions around the combat effectiveness of these particular formations. Prior to their departure for France the Australian forces were subject to multiple inspections with mixed results. 'After all the laudatory accounts of their doings as soldiers', remarked one general, 'it is very difficult to convince them that for purposes of fighting in France they know practically nothing'.³³ Along with their want of discipline, another general singled out the Australians' 'enormous conceit in themselves' as considerable handicaps.³⁴ While both Irish and Australian formations performed well on the whole, redeeming themselves through effective combat performance, these national stereotypes lingered irrespective of the theatre in which they moved and then served.

Theatre snobbery

In addition to its 'class' and nationality, a formation's service history also came under considerable scrutiny during its move to another theatre. Such scrutiny was particularly acute for those formations moving to the Western Front from the subsidiary theatres. Throughout the war there was a two-tier view of the Western Front and the other theatres resulting in a snobbery that favoured the former. This snobbery was expressed at the highest levels of the army. In July 1916, Field Marshal Sir Douglas Haig, commander-in-chief of the British Expeditionary Force [BEF] on the Western Front, commented on the poor performance of the VIII Corps, noting that 'the majority of ... officers are amateurs in hard fighting and some think they know much more than they do of this kind of warfare, simply, because they had been at Gallipoli'.³⁵ Indeed, to have been at Gallipoli was seen as an 'inexcusable fault'.³⁶

Notwithstanding the climatic and geographical differences between the Western Front and the subsidiary theatres, variances in the scale and type of warfare also reinforced such snobbery. Density of artillery fire, for example, revealed both the paucity of ammunition supply in the subsidiary theatres, as well as the difficulties of maintaining effective operational tempo. On the Western Front there was approximately one British gun for every eight yards of front, while in Salonika there was only one gun per two hundred yards.³⁷ For families and the press back home, the view of these subsidiary theatres was coloured by romantic and exotic ideas. They were viewed as places of relative safety when compared with the high tempo, mechanised warfare found on the Western Front.

Although the subsidiary theatres had benefitted from the dissemination of Western Front methods through military pamphlets, instructors, and training schools, the perceived primacy of that front permeated all levels of the army.³⁸ In some instances, this dismissive attitude was more to do with questions of relevance than necessarily plain ignorance. Some methods simply did not translate, or move easily, to a new theatre of operations. This was not unique to the British army, or to the First World War. In the German army the Western Front was perceived as being more advanced than the Eastern Front. More traditional methods were used on the latter front, such as the open deployment of artillery and the greater use of cavalry.³⁹ The 11th Bavarian Infantry Division, for example, found that the knowledge and experiences it gained in the breakthrough battle of Tarnów-Gorlice on the Eastern Front did not easily transfer to the Western Front. In the east, the division had avoided detailed plans and had promoted initiative. Yet, its move into the German Fifth Army on the Western Front was accompanied by increased centralization, at odds with its experience in the east.⁴⁰ In the Second World War, the tactics and ‘self-taught’

doctrine of British armoured formations returning from North Africa to take part in the Normandy campaign were found wanting. The mobilisation of this geographically specific knowledge was subject to friction. Used to 'open country' operations against a dispersed enemy in the desert, the problematic terrain and density of opposition in northwest Europe forced these units to undertake a process of unlearning and relearning.⁴¹

Unlike those armoured formations, whose North African experiences were initially viewed positively, the same cannot be said of those First World War formations arriving in France from Palestine. In their case, they felt that their previous experiences and accumulated knowledge were wilfully devalued. Arriving on the Western Front in April 1918, an officer of the 52nd (Lowland) Division wrote that 'the authorities in France, I imagine, were wholly confident that troops coming from Palestine were bound to be deficient in the most elementary military knowledge'.⁴² One non-commissioned officer [NCO] in the 2/15th Battalion London Regiment bitterly recalled his battalion's first encounter with a Western Front general during a training exercise. Used to the semi-mobile operations found in the deserts of Palestine, his battalion was asked to 'advance across a piece of open country'. This NCO wrote how 'we took a certain pride in the job; we thought we could show these trench-bound soldiers a thing or two'.⁴³ However, the general's response was far from complimentary, revealing some of the frictions associated with embodied practices of a foreign genesis:

'What the hell do you mean by lining up like this? Where are your sections? What's the sergeant think he's doing in the rear?' And so it flowed on in would-be strong language that seemed mild to us, while we 'looked at each

other with a wild surmise' Our new commanders did not find our methods to their taste; in fact they probably considered us inefficient. It is not surprising that the feeling was reciprocated.⁴⁴

This snobbery decelerated a formation's integration into its new force and led to frustration and resentment. Again, we can detect similarities with those German army formations moving from the east to the Western Front. From the start of the Verdun offensive in February 1916, the Western Front was the German army's main theatre. Crown Prince Rupprecht, for instance, recorded in November 1916 that all units that were less effective in battle were now being sent east. Indeed, by May 1917, the best divisions had long been removed from that front.⁴⁵ These attitudes influenced perceptions of knowledge mobilised from that theatre. Arriving on the Western Front in November 1917, Colonel Georg Bruchmüller recalled a frustrating meeting with the German high command [OHL] where certain Western Front staff officers dismissed the experiences of their Eastern Front colleagues. One OHL officer remarked, 'we just don't have enough experience with offensive operations in trench warfare. We should be looking at the Russo-Japanese War'. Bruchmüller wrote exasperatedly: 'And that in spite of Toboly and Galicia, in spite of Riga and Jacobstadt!'⁴⁶ For OHL there was a fixity to Bruchmüller's knowledge and experience that was, initially at least, deemed incompatible with conditions in the west.

For those that experienced such snobbery there was often a palpable hardening, sometimes developing into an obvious resistance, towards the new force. One Irish officer wrote how his unit was glad to serve on the Western Front, 'as everyone tells us we have seen no proper fighting up to this'.⁴⁷ However, even after three months on the Western Front, his attitude towards military operations in France

was still framed in terms of his experience in Palestine, writing that ‘this most leisurely battle would not have suited Allenby if he were here. The Bosch are given plenty of time to clear off and take all their gear with them’.⁴⁸ The Australian Major-General John Monash voiced similar sentiments: ‘war in France is simply child’s play to what it was in Gallipoli’. While he later caveated this statement in light of his experience of the Somme campaign – ‘I said war not battle’ – he was keen to point out that, on the Western Front at least, ‘battle comes to any one man only rarely’.⁴⁹

The experiences of these officers were not unusual. Although they had physically moved, their knowledge, experiences and attitudes remained intimately connected with their old forces and theatres. Such responses are common and not limited to the military. They can often be found in modern, corporate accounts of organisational socialisation. When experiences of ‘old roles’ are recalled, contrasts are naturally generated.⁵⁰ The newcomer, for instance, may evaluate aspects of the new role using old role experiences as ‘anchors’. Indeed, there was something of a paradox here: the physical movement of individuals and units was accompanied by fixity, their ideas were anchored in another time and place. Such responses resonate with ideas of ‘homing’ and ‘re-grounding’ where, in leaving a place, individuals ‘often carry parts of it with them which are reassembled’.⁵¹ For these newly arrived formations the experience of contrast and change was a natural phase in the process of ‘leave-taking’ from an old role and adjusting to a new one.

Irrespective of theatre of origin, departure was a deeply unsettling process for many. It was riven with uncertainty and dislocation. Those leaving the Western Front felt that they were abandoning the real fight. One general recalled how, as his unit embarked for Palestine in March 1918, ‘the feeling was that we were running away and leaving our old comrades in the lurch. But it was neither our own doing or our

wish – to have been in France for 3 years and 4 months and then to be taken when the supreme hour of defeat or victory struck seemed to us all a cruel blow of fortune’.⁵² For those formations waiting to depart there was a pause, a sense of stillness, but also anticipation of what was to come. However, as David Bissell has argued, these events of waiting are not the ‘immobile being-in-world’ that they might superficially appear to be.⁵³ Where possible, formations were subject to purposeful activity through pre-deployment training. This training allowed for the creation of new embodied practices for their future theatre, such as new tactics or drills. This type of training was inconsistent, however, varying between theatres, and often curtailed by the rapidity of departure. The 27th Division, for example, had little more than two weeks between notification and embarkation for Salonika. Similarly, the 7th Division, destined for Italy, received preliminary orders to proceed there on 10 November 1917, arriving in the country on 24 November. The extent of its pre-deployment training was encapsulated in its divisional conference notes: ‘Do what you can in the train. Normal attack formation first opportunity’.⁵⁴ Yet, even during that period of relational immobility on the train journey from France to Italy, the men of the 7th Division carried out pre-deployment training alongside micro-scale routine movements, such as the rapid loading and sight setting of muskets. The hangover of departure was the considerable time it could take for a formation to overcome both its own and its new force’s prejudices. In order to overcome these barriers and smooth over the friction that hindered the movement of knowledge, the army and the formations themselves employed a series of methods to aid integration and mitigate such difficulties.

OVERCOMING BARRIERS

Integration and the concept of 'acclimatising' were familiar to the army of the time. Generally speaking, this follow-on waiting period in a new theatre allowed soldiers to adjust to changes in temperature and terrain. The acclimatisation of soldiers to the punishing climates and environments found within the deserts of Mesopotamia and Palestine, for example, links into debates around 'acclimatisation theory' and the relationships between climate, race, health and empire.⁵⁵ Debates in the mid nineteenth century highlighted concerns that 'no length of seasoning will diminish the deleterious influence of a tropical climate on the European constitution'.⁵⁶ Some commanders, such as Allenby, subscribed to these theories and were acutely aware of the adverse effect of these climatic and physiological factors. When holding the front line in the Jordan Valley in July and August 1918, in which 'no European had passed a summer', Allenby decided to choose troops 'best able to endure the summer' in that valley, namely Australian and Indian forces.⁵⁷

Upon physically moving to a new theatre, all formations had a period of acclimatisation. The Egyptian Expeditionary Force [EEF] codified this policy, stating that 'experience has shown the importance of allowing ... new units arriving in Egypt ... a sufficient period of acclimatisation to ensure their physical fitness to bear the strain of operations in this theatre'.⁵⁸ In this instance, waiting was used as a way of enabling mobility. For some formations, debilitated by malaria and dysentery, it provided an opportunity to recuperate. Upon his battalion's arrival on the Western Front in July 1918, one officer noted how 'we are to be here for a few weeks to get the troops acclimatised and shake off the fever ... taking regular doses of quinine and having certain regulated amounts of work or games and also rest'.⁵⁹ One NCO recounted his battalion's acclimatisation in Egypt where he 'learned what heat meant'. His battalion soon improved and 'learned much in the art of keeping cool

from the experience of our forerunners'.⁶⁰ However, there was more to acclimatising than adjusting to changes in temperature and terrain. The army was not ignorant of the difficulties faced by formations that moved between theatres. In this respect, it was well served by its pre-war experience of colonial policing. Deployed to various corners of the Empire, the army used this experience to refine and, in some cases, develop a series of methods to help integrate formations and overcome some of the initial barriers and prejudices faced.

The most appropriate methods for the integration of new formations and the sharing of expertise were subject to discussion. Although there were similarities in practice, there was no standardised approach to integration across all theatres. The process was dependent on the local situation. The lack of large-scale offensive operations in Salonika, for example, often gave formations considerable time to adjust to the new conditions.⁶¹ Unwilling to enforce a homogeneous approach to integration, the army left each force to decide the order and extent to which formal methods were used. In addition to these formal methods there were opportunities for localised schemes, devised and organised by divisions and individual commanders.

Formal Methods: Attachments

The use of attachments was widespread across all theatres and took place throughout the war. An attachment was the temporary placement of an individual, group of individuals or an entire unit with another formation for the purposes of learning by doing. It represented a useful form of 'on the job' learning. Though promoted by higher headquarters, it was in many cases a common sense adoption of a tried and tested method. Brigades from the 13th (Western) Division, for example, were 'attached to the 29th Division to learn trench duties' when they arrived at Gallipoli.

The corps commander was under 'strict order' from his superiors to 'wrap them [13th Division] up in cotton wool for the present and not make use of them for attacks in the meantime'.⁶² As part of this general scheme of attachment, the 29th Division's commander lectured the newly arrived commanders to help them 'learn their business a little'.⁶³ The aim was to mobilise knowledge from existing individuals and units to newly arrived ones.

A similar example can be found in the experience of the 54th (East Anglian) Division following its own arrival at Gallipoli. Throughout September 1915 arrangements were made for 'parties of 300 and 350 New Zealanders and Australians to be exchanged' for a corresponding number of men in the 161st and 162nd Brigades.⁶⁴ The purpose of this exchange was 'to accustom the men of the 54th Division to their new surroundings, and to enable them to pick up hints, and profit by, experience gained from troops, who were used to warfare'.⁶⁵ To support this exchange the 54th Division's headquarters circulated a number of pamphlets and memoranda that had been issued by the Australian and New Zealand Army Corps with the order that 'the instructions therein contained should be made known to all troops'.⁶⁶ Attachments were also used in the latter years of the war. Arriving in Palestine from Salonika in July 1917, the 60th Division ensured that each of its battalions sent two officers to spend forty-eight hours with the 52nd Division 'until all senior officers had visited the trenches'.⁶⁷ By drawing on the experience of established divisions, new formations could begin to adjust their existing procedures to suit their new environment.

Formal Methods: Schools and Unit Training

Along with attachments, formations could also access formal training at schools of instruction situated at higher levels of command. This formal training complemented the 'on the job' nature of the attachment system. It also provided a foundation upon which formations could then develop their own local responses through unit training. Upon arrival in a new theatre it was standard practice for formations to despatch a cadre of officers and NCOs to schools of instruction. These schools exposed formations to new and existing developments in that theatre. Following its arrival in Egypt from Gallipoli the 54th Division spent much of February and March 1916 sending officers and men for instruction in bombing and transport duties, and to lectures on cooperation between aircraft and artillery.⁶⁸ Upon returning from these schools of instruction these new methods would be disseminated through a form of cascade training at unit level. While often fixed in location, these high level schools of instruction were materially dynamic with changing personnel and technologies. The syllabi were also constantly mobile, adapting in response to suggestions from the front line and up to date doctrine from the Western Front and other theatres. Instructional staff, for example, were often sent for 'short periods of attachment' to maintain close touch with units in the field and to study conditions on the front line.⁶⁹ These measures ensured that the schools were responsive to the operational requirements of units and, therefore, able to provide up to date instruction.

Unit training at divisional level and below complemented this high level instruction. Although this training was 'assisted, controlled and supervised' by higher formations, it was carried out under the 'personal guidance' of the divisional commander and his subordinates.⁷⁰ The nature and extent of this collective training depended on the tempo and operational demands in theatre. For formations arriving in Italy there was a requirement to conduct training in hill, mountain and open warfare.⁷¹

This represented an entirely different type of training to that conducted on the Western Front. The collective training of the 23rd Division, for example, was to 'fit all ranks for open warfare and fighting in the lower foothills', along with the training of Lewis gunners in 'judging distance with a view to their use in open warfare'.⁷² The latter point, in particular, was an aspect that had been neglected owing to the flat nature of the ground on the Western Front. This required formations to train the body for a new type of warfare, creating new embodied practices for the Italian theatre.⁷³

Individual Methods

Although the army developed an explicit, formal system for integration through schools and publications, there was an implicit, informal system that ran alongside this, dominated by individual action. Commanders often attempted to 'self-integrate' their formations using their own initiative. Acts of self-integration included lower level attachments, as well as the organisation of lectures and demonstrations. Not long after arriving on the Western Front, the 11th Division's commander invited an officer from the neighbouring 21st Division to deliver a lecture on the battle of the Somme, and the Third Army's chemical advisor to demonstrate the use of a German flammenwerfer.⁷⁴ Using initiative and taking advantage of the army's network of expertise, the division was able to mobilise the existing knowledge of established formations and individuals, enabling its new troops to adjust to the experience of trench warfare.

Self-integration could also occur by mobilising knowledge through informal conversations or information exchanges between individuals. Newly arrived at Gallipoli, one colonel recalled how an officer in the 2nd Battalion Royal Fusiliers was 'good enough to let us have a perusal of his Trench Standing Orders'. This particular

battalion was a regular formation that had been part of the original landing at Gallipoli in April 1915. It was not long before that colonel and his men began referring to the orders as ‘Napoleon’s Maxims’, proving invaluable as ‘a record of practical experiences in trench routine’.⁷⁵ The importance of this informal knowledge exchange was vital to the working of the army. Its significance was predicated on the army’s highly personalised officer corps. The use of informal social networks, for example, allowed individuals to circumvent often unwieldy formal systems, thus reducing the problems associated with knowledge lag.⁷⁶ Yet, for those networks to exist, and for those conversations to take place, there needed to be a connection. Such connections were made in a number different ways in the military: attendance at the same public school, shared attendance at Sandhurst or the Staff College, previous military service or through membership of other homosocial groups, such as hunts or gentlemen’s clubs. These shared connections offered a way of communicating, sharing and mobilising knowledge on a global scale.

Sometimes these connections yielded information pertinent to promotion prospects or simply provided information on progress in a particular theatre. However, they also facilitated the two-way exchange of practical knowledge relating to tactical methods. While serving at Gallipoli, Beauvoir de Lisle kept in close contact with his former colleagues on the Western Front. This contact enabled him to disseminate Western Front methods within his new theatre of operations. Writing to General Sir Ian Hamilton, he noted that he had

heard last night from my old B[riga]de Machine Gun officer ... who is now Assistant Instructor at the GHQ Machine Gun School, France. He has worked out my idea of M[achine] G[un] Indirect Fire and sent me his

circulars. I consider them so valuable that I enclose them for your information. You may consider the advisability of a MG School here⁷⁷

There were, of course, instances where social networks failed to produce the required solutions. This often came down to the perennial issue of relevance. Prior to the Beersheba operations in October 1917, for example, Lieutenant-General Sir Philip Chetwode consulted General Sir Henry Rawlinson, a fellow Old Etonian, over the difficulties of water supply in the Palestine theatre. The reply from Rawlinson was sensible enough: 'Why don't you do as I've done in my Army Area here? I've got nearly twenty miles of pipe lines laid down'. Chetwode smiled, remarking: 'I must tell him ... we've already got one hundred and fifty miles of pipe line'.⁷⁸

The army also exploited these informal social networks. It understood the benefits of networking and conversation as ways of not only mobilising knowledge, but also integrating individuals into the army itself. Such informal methods were particularly useful with the 'Indianisation' of British divisions within the EEF in early 1918. A product of manpower problems in late 1917, the Indianisation process was accelerated as a result of the 1918 German spring offensives on the Western Front. Allenby, in Palestine, was forced to supply the BEF with infantry units, amounting to 60,000 men. In return, he received several Indian army infantry divisions from Mesopotamia, and a number of Indian cavalry regiments and battalions. The rotation of Indian army soldiers into Palestine began in earnest in April 1918. By the summer of 1918 six of seven infantry divisions and two of four mounted divisions in the EEF were essentially 'Indian army' formations.⁷⁹

Once again, that waiting period between arrival in theatre and commitment to major operations was made up of a variety of individual and routine movements.

Indian army units were exposed to similar formal integration methods as other newcomer formations. Attachment schemes, training schools, lectures and demonstrations were all used to great effect. A series of bespoke methods were also developed, which involved the establishment of a reserve of 'Hindustani speaking' officers, and the appointment of staff officers with 'Indian experience' to these newly arrived units.⁸⁰ Running alongside these institutional methods was the more informal act of socialising. In the 60th Division, Major-General Sir John Shea held a durbar for newly arrived Indian army officers.⁸¹ An event associated with the British Empire in India, the durbar served to welcome new officers in a way that was instantly recognisable to them. This type of socialising was also practiced higher up the chain of command with Chetwode entertaining all Indian officers to tea at corps headquarters.⁸² These events helped to 'reinforce the personal leadership bonds' between the senior commanders and the men who would lead the sepoys into action.⁸³ Both Shea and Chetwode were Indian army officers themselves, and were able to draw on their own cultural reference points to facilitate the integration of these newcomers. Once again, this mobility of knowledge was accompanied by a relative stasis: the ideas moved were from geographically defined anchor points.

Owing to the high proportion of Indian battalions, officers' clubs were also established in 'Indianised' divisions, providing a space for the exchange of ideas. These clubs served a dual purpose: first, they enabled Indian officers to learn the ropes of their new divisions, and, secondly, they helped British officers negotiate the customs of Indian units, such as dietary, spiritual and language needs.⁸⁴ Such cultural and social events were also extended to NCOs and other ranks through sporting events and training competitions.⁸⁵ These socialising activities served to foster *esprit de corps* and to inculcate a sense of unity within these newly reorganised divisions.

The true test of the effective reorganisation and integration of these Indianised formations, however, was the renewal of offensive operations in late 1918. Forced to postpone large-scale operations, Allenby finally launched the battle of Megiddo on 19 September 1918. For the 60th Division, its part in the battle represented its first operation since May 1918. Between May and September 1918 the division's experience of operations came from a series of small-scale raids in which its Indian battalions performed well.⁸⁶ This experience was mirrored in the 10th Division. In an after action report its commander commented that, although the 'Indian troops were new to the Division', raiding 'afforded a good illustration of their value They showed the greatest determination, dash and initiative'.⁸⁷

Reports on the performance of the Indianised divisions during the Megiddo campaign referred to the impact of reorganisation. Shea noted that 'on the 19th September (48 days after the Division had been reorganised), the men closed with their enemy with eagerness and determination ... on this day the new 60th Division "found itself"'.⁸⁸ For the commander of the 53rd Division the fact that his formation was 'only a very few weeks before operations commenced ... to all intents complete' made 'the fine performance of the Indian troops ... all the more remarkable'.⁸⁹ The EEF's quantitative and qualitative superiority ensured that its success at Megiddo turned into an Ottoman rout. The promotion of a systematic retraining and integration programme, supported by informal socialising methods, ensured that the most current tactics, weapons and methods of command were embedded into these divisions and the wider EEF.

THE BENEFITS OF MOBILITIES

The intensive use of both institutional and individual integration methods brought newly arrived divisions of differing 'class' and nationality into contact with neighbouring formations and the existing training infrastructure. They allowed formations to experience new geographical, tactical and organisational conditions in a controlled way. They also provided a necessary precursor to a division's understanding of its new role and aided in its adjustment to the values and norms of a new expeditionary force. Though the integration of divisions was an important precursor for operational cohesion and effectiveness, it was not a one-way process. There is much to be said for the impact and benefits that newcomers could have on their new forces.

Commanders

The arrival of a new commander often enabled formations and forces to benefit from new knowledge and ideas. The appointment of a new commander could disrupt institutional memory, break longstanding routines and expose units to new practices and approaches, particularly when those leaders had different backgrounds or experiences from their predecessors.⁹⁰ Conversely, new commanders might also experience a certain degree of 'stickiness'. Their ways of working could be considered inappropriate and subject to 'Not Invented Here' syndrome, resulting in a battle against existing cultural or social processes. In short, their ideas might be constrained, forced to wait for acceptance.

The EEF benefitted in different ways from its two commanders-in-chief: Archibald Murray and Edmund Allenby. Having served on the Western Front and in the War Office, Murray commanded the EEF from 1916-1917 and arguably laid the foundations for Allenby's subsequent defeat of the Ottoman army in 1918. While

removed from its intense industrialisation in 1916-1917, Murray was a keen observer of developments on the Western Front. He had an innovative streak, introducing both tanks and gas to the Palestine theatre, although neither met with much success.⁹¹ Prior to his departure in June 1917 he was also instrumental in establishing a specialist trench warfare school at El Arish to ensure that the force learned the basics of 'combined training and tactical handling of Stokes Guns, Lewis Guns and bombers'.⁹²

Murray's successor, Allenby, was appointed commander-in-chief of the EEF after spending almost three years on the Western Front. Known in France for his explosive temper, Allenby had a powerful effect on the initially demoralised EEF. Allenby was 'the man the men worked for, the image we worshipped', a commander who would 'live among us and lead us'.⁹³ Within six weeks of taking up his appointment in Palestine Allenby had tailored the EEF to mirror the forces he had commanded in France: moving his knowledge and skills with him. This restructuring enabled contemporary British doctrine as it had evolved in France to take root in the Middle East. Allenby also promoted technology transfer, building on Murray's initial venture by requesting more 'gas equipment and personnel' from the War Office. Gas had been used to great effect by Allenby's forces in France and he was certain that it 'ought to be of great use opposite Gaza, and possibly elsewhere'.⁹⁴ He also had no qualms about bringing his own, recent knowledge to bear. Following an inspection of Eastern Force's front in July 1917 he wrote to the force's commander voicing concern over the narrowness of the trenches. To Allenby, this contradicted 'experience in France' which suggested that narrow trenches led to greater casualties. However, rather than embarrassing the general or employing a heavy handed approach, he simply asked him to consider the matter and report his modifications.⁹⁵

Allenby was not an exception to the rule. There are numerous examples of other commanders transferring their knowledge and experience from one theatre to another. Lieutenant-General Sir Stanley Maude, for example, drew on his experience of commanding in France and Gallipoli to overhaul medical and logistical practices when appointed commander-in-chief of Indian Expeditionary Force 'D' in Mesopotamia.⁹⁶ Similar examples can also be found in the German army. On the Eastern Front, Bruchmüller experimented with a variety of artillery innovations, including the double creeping barrage and silent registration. Arriving on the Western Front in late 1917, Bruchmüller brought many of his innovations with him. The fire plans for the 1918 German spring offensives, for instance, were greatly influenced by his principles.⁹⁷

Formations

Formations also shared knowledge and experience between themselves. This process constituted a form of horizontal learning where formations were able to innovate and learn extremely rapidly from the experience of their colleagues.⁹⁸ The experience of British formations within the Italian Expeditionary Force [IEF] provides a good example of such a process. Upon their arrival in Italy in November 1917, divisions within the IEF had been 'well received' and benefitted from localised attachment schemes to aid their acclimatisation to the diverse Italian terrain.⁹⁹ However, it was not long before the force began to share its Western Front experience with long serving Italian formations.

This experience was mobilised through three different means. First, the IEF used its own personnel. Within weeks of its arrival the force sent a number of officers to the Italian front lines. One British officer recalled how he 'arranged that every day

an Officer from one of our batteries ... should visit the front line with an interpreter'.¹⁰⁰ He believed that this British intervention was 'so much appreciated' by the Italians who have 'done so much for us in this line'.¹⁰¹ The British also sent staff officers to the Italian front line to advise on administrative issues. These visits allowed officers to 'discuss matters' with the Italians, 'throwing out suggestions as to laying out defences, machine gun arrangements, wiring, reliefs ...'. Officers were instructed to 'drop hints only', but soon enough Italian officers began to ask for 'copies of notes and suggestions ... and have asked us for any Notes or Hints on Training'.¹⁰² British tactical pamphlets – often distilled from Western Front experience – were translated into Italian and issued 'in large numbers' to Italian formations. In short, when knowledge was mobilised in a way that valued and responded to the experiences of the Italians it was better received.

Secondly, practical demonstrations were used. Not long after the IEF's arrival in Italy it carefully organised its defences to reflect its experience on the Western Front, with greater prominence given to defence in depth. This particular system aimed to blunt the enemy's attack. Instead of a single, well-manned defensive front line, the defence in depth system consisted of multiple lines in order to weaken an incoming assault. The Italians, however, favoured a single line. Such an arrangement meant that the Austro-Hungarian forces could 'form up unseen in the valley ... and then rush the trenches in a short assault giving the defence no chance'.¹⁰³ To mitigate these defensive inadequacies the IEF organised its defences to highlight 'the folly of depending on single defensive lines into which all men, machine-guns etc are crowded'. Frequent visits by Italian officers resulted in this knowledge finding its way back to the higher command of the Italian army. Its front lines were soon 'thinned and they have taken up our [British] system of the employment of machine-guns'.¹⁰⁴ This

new, British-inspired approach to defence was crystallised in a manifesto by General Armando Diaz, the Italian army's commander-in-chief. In this manifesto he highlighted the problems of 'putting too many men in the front line' and, according to General Sir Herbert Plumer (Commander in Chief, Italian Expeditionary Force), it was clear that the Italians were now 'paying attention to defence in depth ... and are certainly improving'.¹⁰⁵

Thirdly, collaborative methods were employed through the establishment of training schools. The idea of using this method had been mooted early on in the war. There had been a call for British and French officers to lecture at the Italian Staff College under the 'guise of "exchange of ideas"'.¹⁰⁶ However, instead of pursuing this method the IEF employed a more sensitive approach. Italian officers were invited to attend its own recently established training schools. Plumer noted that he had 'asked the Italians to send officers – as many as they like up to 100'. There was initial reticence at first: 'I hope the Italians would have accepted the offer ... but they are very sensitive ... and any attempt at pressure is fatal'.¹⁰⁷ Yet, by early February 1918 the Italian army was sending its officers to British schools. This was only the start. Subsequent measures were soon put in place for British, French and Italian officers to attend each other's schools, leading to a 'constant interchange of ideas' between the three forces.¹⁰⁸

The army's multi-faceted approach to knowledge sharing with its Italian ally not only highlights the number of different ways that knowledge could be moved between formations, but also the importance of sensitivity to different organisational cultures. Moving this knowledge of experience from one theatre to another had to be done 'quietly and patiently'.¹⁰⁹ The Italians were willing to learn from the British, but they were 'proud and sensitive', and would not respond well to 'any appearance of

superiority or of imparting instruction'.¹¹⁰ Instead, everything was to be done by 'illustration and demonstration'.¹¹¹ This approach paid off with the Italians effectively counter-attacking at the battle of Vittorio Veneto in October 1918, delivering a resounding blow to the Austro-Hungarian army.

CONCLUSIONS

According to Field Marshal Sir Douglas Haig, the First World War centred around three things: men, munitions and movement.¹¹² The war saw the physical movement of men and *matériel* on a significant, global scale, and, with that, the movement of knowledge and ideas. This knowledge was spread through material means, such as letters and military pamphlets, the movement of bodies, notably formations and commanders, as well as through embodied practices. Underpinned by its pre-war experiences, the British army possessed a culture and ethos that gave it the flexibility to adapt to changing geographies and mobilities. However, it was by no means perfect. Where the movement of knowledge and experience were concerned the process was far from smooth with resistance encountered. Newcomers were subject to certain barriers relating to geographical, cultural and organisational differences.

Formations did not instantly 'get up to speed' upon arrival, nor did they wholeheartedly embrace the culture and norms of their new expeditionary forces. Prejudice and snobbery existed, particularly against those formations of a certain 'class' or nationality, or those who had served in a subsidiary theatre.

As we have seen though, problems of resistance were not unique to the First World War or to the British army. Indeed, the army was not exceptional, and it did not have a monopoly on learning and adaptation. All belligerents were learning, often

through a painful process of trial and error. Learning in wartime was a constant cycle of action and reaction. The ability to learn, to adapt and to do so quickly was a necessary, though by no means sole, contributor to success. More important, perhaps, was the ability to cope with and manage the complexity of the battlefield.¹¹³

Exploration of the movement and integration of combat formations and commanders across various sites has broader implications for our understanding of the First World War. First, the movement of formations enhances our understanding of the global nature of the war. By applying the 'global turn' in First World War studies, this examination of the globalised movements of formations and individuals between geographically distinctive sites shifts our focus away from the dominance of the Western Front. By incorporating these various theatres and forces into the narrative of learning and adaptation we are presented with a sharper, more granular, perspective on how different environments, enemies and individuals affected the army's learning capabilities. In short, we are able to see learning as a communicative process, connecting at multiple levels across different theatres and different forces.

Secondly, how these various formations were integrated challenges how we perceive the army as an institution. Often perceived as an unwieldy, bureaucratic behemoth, the army actually demonstrated a considerable degree of organisational flexibility, particularly through its unwillingness to enforce a homogeneous approach across theatres. Although there was commonality of method across the various theatres, it was left to individual formations to decide the order and extent to which these institutional methods were utilised. By refusing to enforce a standardised policy the army increased the likelihood that formations would develop their own personalised and, arguably, more effective way of acclimatising to their new force. This flexible approach gave formations the opportunity to self-integrate. Initiative and

individual agency were key to this process. While bound by a shared ethos, the army was an organisation composed of millions of individuals, forcing us to recognise the benefits, tensions and complexity that human choice and behaviour brings even in such a disciplined environment.

Finally, this examination challenges the often dualistic perception of the First World War as either a static or mobile conflict, as well as the idea that mobilities can be defined purely in terms of people and *matériel*. Despite focusing on large scale, inter-theatre movements it is impossible to overlook the many micro movements, pauses, slowing and resistances that formed part of that wider process. Mobilities are relational. In theatres that are traditionally perceived as mobile, such as Palestine, there were pauses, instances of stillness and suspension whether through climatic, logistic or corporeal means. Conversely, the periods of waiting that accompanied departure and arrival were often shot through with activity – of bodies moving, marching, drilling and training. Immobility and mobility in the First World War were intertwined and dialectical in nature. To understand mobilities in this war we need to move beyond simplistic binaries of static and mobile, action and inactivity, and instead embrace a process that recognises the relationships and differences between the two.

NOTES

¹ J. Knight, *The Civil Service Rifles in the Great War: All Bloody Gentlemen*, Barnsley, 2004, 147.

² Discussion of similar movements can be found in the literature on the mobility and circulation of ideas, see J. Urry, *Mobilities*, Cambridge, 2007; M. Sheller and J. Urry, The new mobilities paradigm, *Environment and Planning A* 38 (2006) 207-226.

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- ³ The cavalry was not entirely redundant in other theatres. Both mounted regiments and the Imperial Camel Corps were used in the more mobile conditions in Palestine. See S. Badsey, *Doctrine and Reform in the British Cavalry*, Aldershot, 2008.
- ⁴ R. Woodward and K. Neil Jenkins, Soldier, in: P. Adey, D. Bissell, K. Hannam, P. Merriman and M. Sheller (Eds), *The Routledge Handbook of Mobilities*, Abingdon, 2014, 358.
- ⁵ P. Adey, If mobility is everything then it is nothing: towards a relational politics of (im)mobilities, *Mobilities* 1 (2006) 76, 83.
- ⁶ Adey, If mobility is everything, 83, 87.
- ⁷ S. Gray, Fuelling mobility: coal and Britain's naval power, *Journal of Historical Geography* 58 (2017).
- ⁸ S. Graham and N. Thrift, Out of order: understanding repair and maintenance, *Theory, Culture and Society* 24 (2007) 10.
- ⁹ S. Graham, When infrastructures fail, in: S. Graham (Ed.), *Disrupted Cities: When Infrastructures Fail*, London, 2010, 9-11.
- ¹⁰ For exceptions to this, see Woodward and Jenkins, Soldier, 358-366; C. Kaplan, Mobility and war: the cosmic view of the US 'air power', *Environment and Planning A* 38 (2006) 395-407.
- ¹¹ T. Cresswell, Mobilities II, *Progress in Human Geography* 36 (2012) 651; E. McCann, Urban policy movements and global circuits of knowledge: towards a research agenda, *Annals of the Association of American Geographers* 10 (2011) 107-130. For examples of networks of knowledge scholarship, see J. Havia, *The Imperial Security State: British Colonial Knowledge and Empire-Building in Asia*, Cambridge, 2015; Z. Laidlaw, *Colonial Connections 1815-1845: Patronage, the Information Revolution and Colonial Government*, Manchester, 2005; C. Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, 1780-1880*, Cambridge, 2000.
- ¹² T. Cresswell, Towards a politics of mobility, *Environment and Planning D: Society and Space* 28 (2010) 26.
- ¹³ Cresswell, Mobilities II, 651; Cresswell, Towards a politics of mobility, 17, 26; McCann, Urban policy movement, 121.
- ¹⁴ C. von Clausewitz, *On War*, translated by M. Howard and P. Paret, Oxford, 1976, 68.

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- ¹⁵ E.C. Kiesling, On War without the fog, *Military Review* 81 (2001) 86-87; T. Cresswell, Friction, in: Adey, Bissell, Hannam, Merriman and Sheller (Eds), *The Routledge Handbook of Mobilities*, 107-115.
- ¹⁶ Woodward and Jenkins, Soldier, 362.
- ¹⁷ See V. Huber, *Channelling Mobilities: Migration and Globalisation in the Suez Canal Region and Beyond, 1869-1914*, Cambridge, 2013.
- ¹⁸ 'Taranto Route: Effect of closure', 30 January 1918, CAB 25/62, The National Archives of the United Kingdom, Kew [hereafter TNA].
- ¹⁹ See D.T. Zabecki, *Steel Wind: Colonel Georg Bruchmuller and the Birth of Modern Artillery*, Westport CT, 1994; C. Stachelbeck, *Militärische Effektivität im Ersten Weltkrieg. Die 11. Bayerische Infanteriedivision 1915 bis 1918*, Paderborn, 2010.
- ²⁰ For the 'more-than-human' nature of terrain in theatres of war, see I. Forsyth, Designs on the desert: camouflage, deception and the militarization of space, *Cultural Geographies* 21 (2014) 247-265; I. Forsyth, Subversive patterning: the surficial qualities of camouflage, *Environment and Planning A* 45 (2013) 1037-1052.
- ²¹ War Office, *Statistics of the Military Effort of the British Empire during the Great War 1914-1920*, London, 1922, 30, 62-63.
- ²² Lieutenant-General Sir F. W. Stopford to General Sir I. Hamilton, 11 August 1915, 7/2/19, Hamilton Papers, Liddell Hart Centre for Military Archives, London [hereafter LHCMA].
- ²³ E. Erickson, *Ottoman Army Effectiveness in World War I: A Comparative Study*, London, 2007, 130.
- ²⁴ P. Simkins, *Kitchener's Army: The Raising of the New Armies, 1914-16*, Manchester, 1988, 39.
- ²⁵ Memoir: The Narrative of the German War, n.d., 3/1, Beauvoir de Lisle Papers, LHCMA.
- ²⁶ Hamilton to Lord Kitchener, 11 August 1915, 7/1/6, Hamilton Papers, LHCMA.
- ²⁷ Major-General Sir A. L. Lynden-Bell to Major-General Sir F. Maurice, 26 August 1917, WO 106/718, TNA.
- ²⁸ Some Aspects of Lord Allenby's Palestine Campaign, 25 April 1923, 6/2, Shea Papers, LHCMA; First Tour of Lt-Col K. Barge, General Staff to Macedonian Front, 3 June - 5 July 1918, WO 106/1347, TNA.
- ²⁹ Salonika diary of Captain N.E. Drury, 18 October 1915, 7607-69, Drury Papers, National Army Museum, London [hereafter NAM].

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- ³⁰ Western Front diary of Captain N.E. Drury, 13 July 1918, 7607-69, Drury Papers, NAM.
- ³¹ E.A. Cameron, Internal policing and public order, c. 1797 to 1900, in: E.M. Spiers, J.A. Crang and M.J. Strickland (Eds), *A Military History of Scotland*, Edinburgh, 2012, 448.
- ³² Lynden-Bell to Brigadier P. Howell, 20 February 1916, Howell Papers, LHCMA; General Sir J. Cowans to Major-General Sir A. Godley, 4 February 1916, Godley Papers, LHCMA.
- ³³ Lynden-Bell to Howell, 20 February 1916, Howell Papers, LHCMA.
- ³⁴ General Sir A. Murray to Robertson, March 1916, 79/48/3, Murray Papers, Imperial War Museum, London [hereafter IWM].
- ³⁵ Diary of Field Marshal Sir Douglas Haig, 29 June 1916, WO 256/10, TNA.
- ³⁶ G.J. De Groot, *Douglas Haig, 1861-1928*, London, 1988, 252.
- ³⁷ Salonika Diary of General Sir W. Gillman, 5 August 1917, MD1161 4/19, Gillman Papers, Royal Artillery Institution [hereafter RAI].
- ³⁸ See A. Fox-Godden, Beyond the western front: the practice of inter-theatre learning in the British army of the First World War, *War in History* 23 (2016) 190-209.
- ³⁹ I am thankful to Dr Tony Cowan for pointing this out to me.
- ⁴⁰ C. Stachelbeck, Strategy 'in a microcosm': process of tactical learning in a WW1 German infantry division, *Journal of Military and Strategic Studies* 13 (2001) 10-11.
- ⁴¹ J. Buckley, *British Armour in the Normandy Campaign*, London, 2004, 27, 75, 92.
- ⁴² Memoir, n.d., PP/MCR/214, Kermack Papers, IWM.
- ⁴³ Memoir: 'N.C.O.', 1932, LHCMA.
- ⁴⁴ Memoir: 'N.C.O.', 1932, LHCMA.
- ⁴⁵ A. Cowan, Genius for war? German operational command on the western front in early 1917, unpublished PhD thesis, King's College London, 2016, 243.
- ⁴⁶ D.T. Zabecki, *The German 1918 Offensives: A Case Study in the Operational Level of War*, London, 2006, 126.
- ⁴⁷ Palestine diary of Captain N.E. Drury, 20 July 1918, 7607-69, Drury Papers, NAM.
- ⁴⁸ Western Front diary of Captain N.E. Drury, 8 August 1918, 7607-69, Drury Papers, NAM.

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- ⁴⁹ Major-General J. Monash to wife, 20 June and 26 October 1916, 3DRL/2316 1/1, Monash Papers, Australian War Memorial, Canberra [hereafter AWM]. Anzac Cove was the Australian Imperial Force's landing beach during the Gallipoli campaign.
- ⁵⁰ M.R. Louis, Surprise and sense-making: what newcomers experience in entering unfamiliar organizational settings, *Administrative Science Quarterly* 25 (1980) 236-237.
- ⁵¹ K. Hannam, M. Sheller, and J. Urry, Editorial: mobilities, immobilities, and moorings, *Mobilities* 1 (2006) 10.
- ⁵² Memoir of 'The 18th KGO Lancers in France', n.d., 6506-17-1, Mills Papers, NAM.
- ⁵³ D. Bissell, Animating suspension: waiting for mobilities, *Mobilities* 2 (2007) 294-295.
- ⁵⁴ 7th Division War Diary, 16 November 1917, WO 95/1633, TNA.
- ⁵⁵ See, for example, E. Newlands, *Civilians into Soldiers: War, the Body and British Army Recruits, 1939-1945*, Manchester, 2014; D.N. Livingstone, Human acclimatization: perspectives on a contested field of inquiry in science, medicine and geography, *History of Science* 25 (1987) 359-394.
- ⁵⁶ Quoted in Livingstone, Human acclimatization, 370.
- ⁵⁷ E. Dolev, *Allenby's Military Medicine: Life and Death in World War I Palestine*, London, 2007, 134-135.
- ⁵⁸ EEF War Diary, Memo G.S. 569, 12 May 1917, WO 95/4634, TNA.
- ⁵⁹ Palestine Diary, 20 July 1918, NAM.
- ⁶⁰ Memoir: 'N.C.O', 1932, LHCMA.
- ⁶¹ 80th Brigade War Diary, 1-31 December 1915, WO 95/4887, TNA.
- ⁶² Hamilton to Kitchener, 7 July 1915, Hamilton Papers, 7/1/6, LHCMA.
- ⁶³ Memoir, 27 July 1919, 3/1, Beauvoir de Lisle Papers, LHCMA; 13th Division War Diary, 15 July 1915, WO 95/4300, TNA.
- ⁶⁴ 54th Division War Diary, 1-11 September 1915, WO 95/4324, TNA; Lieutenant-General Sir W.R. Birdwood to Hamilton, 4 September 1915, 7/1/16, Hamilton Papers, LHCMA.
- ⁶⁵ 54th Division War Diary, 1 September 1915, WO 95/4324, TNA.
- ⁶⁶ Memo from Lieutenant-Colonel E. Da Costa, 4 September 1915, WO 95/4324, TNA.
- ⁶⁷ 180th Brigade War Diary, 19 July 1917, WO 95/4669, TNA.
- ⁶⁸ 54th Division War Diary, 6-25 March 1916, WO 95/4633, TNA.

-
- ⁶⁹ EEF GHQ War Diary, 17 May 1917, WO 95/4367, TNA.
- ⁷⁰ GHQ, *SS152 Instruction for the Training of the British Armies in France*, France, 1917, 8.
- ⁷¹ 7th Division War Diary, Divisional Commander's Conference, 4 December 1917, WO 95/4218, TNA.
- ⁷² 23rd Division War Diary, Corps Commander's Conference, 2 December 1917, WO 95/4229, TNA.
- ⁷³ Woodward and Jenkins, Soldier, 357; J. Hockey, 'Head down, bergen on, mind in neutral': the infantry body, *Journal of Political and Military Sociology* 30 (2002) 154-158.
- ⁷⁴ 11th Division War Diary, 23 July and 26 August 1916, WO 95/1787, TNA.
- ⁷⁵ F.L. Morrison, *The Fifth Battalion, Highland Light Infantry in the War 1914-1918*, Glasgow, 1921, 15.
- ⁷⁶ For a modern example, see S. Catignani, Coping with knowledge: organizational learning in the British army, *Journal of Strategic Studies* 37 (2014) 30-64.
- ⁷⁷ Beauvoir de Lisle to Hamilton, 24 July 1915, 7/1/21, Hamilton Papers, LHCMA.
- ⁷⁸ G.E. Badcock, *A History of the Transport Services of the Egyptian Expeditionary Force, 1916-1917-1918*, London, 1925, 313.
- ⁷⁹ Erickson, *Ottoman Army Effectiveness*, 122, 126.
- ⁸⁰ 75th Division War Diary, 24 May 1918, WO 95/4680, TNA; Notes on Corps Commander's Conference, 10 May 1918, WO 95/4481, TNA.
- ⁸¹ 179th Brigade War Diary, 10 July 1918, WO 95/4667, TNA.
- ⁸² 179th Brigade War Diary, 4 September 1918, TNA.
- ⁸³ J.E. Kitchen, *The British Imperial Army in the Middle East*, London, 2014, 210.
- ⁸⁴ 158th Brigade War Diary, 4 August 1918, WO 95/4625, TNA.
- ⁸⁵ 179th Brigade War Diary, 23 August 1918, TNA; 158th Brigade War Diary, 2 August 1918, TNA.
- ⁸⁶ 60th Division War Diary, 12-13 August 1918, WO 95/4660, TNA.
- ⁸⁷ 10th Division War Diary, Report on Operation, 12-13 August 1918, WO 95/4568, TNA.
- ⁸⁸ 60th Division War Diary, Narrative on Operations, 6 October 1918, TNA.
- ⁸⁹ 53rd Division War Diary, Narrative on Operations, 1 October 1918, WO 95/4615, TNA.
- ⁹⁰ K. Harkness and M. Hunzeker, Military maladaptation: counterinsurgency and the politics of failure, *Journal of Strategic Studies* 38 (2015) 6.

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- ⁹¹ Y. Sheffy, The chemical dimension of the Gallipoli campaign: introducing chemical warfare to the middle east, *War in History* 12 (2005) 316.
- ⁹² EEF GHQ War Diary, Memo to Eastern Force, 5 July 1917, TNA.
- ⁹³ T.E. Lawrence, *Seven Pillars of Wisdom*, London, 1974, 393; Memoir, n.d., PR00469, Dunk Papers, AWM.
- ⁹⁴ Allenby to Field Marshal Sir W.R. Robertson, 8 August 1917, 8/1/68, Robertson Papers, LHCMA.
- ⁹⁵ EEF GHQ War Diary, 2 August 1917, WO 95/4368, TNA.
- ⁹⁶ A. Syk (Ed.), *The Military Papers of Lieutenant-General Sir F. S. Maude, 1914-1917*, Stroud, 2012, 15, 18.
- ⁹⁷ Zabecki, *German 1918 Offensives*, 55-57.
- ⁹⁸ R.T. Foley, A case study in horizontal military innovation: the German army, 1916-1918, *Journal of Strategic Studies* 35 (2012) 799-827.
- ⁹⁹ J.E. Edmonds, *History of the Great War: Military Operations, Italy 1915-1919*, London, 1949, 133-134.
- ¹⁰⁰ Impressions of Lieutenant-Colonel C.N. Buzzard, October-November 1917, CAB 25/22, TNA.
- ¹⁰¹ Impressions of Lieutenant-Colonel C.N. Buzzard, October-November 1917, TNA.
- ¹⁰² Italian report, 13 January 1918, CAB 24/39/94, TNA.
- ¹⁰³ An Artillery Officer in the First World War, 19 January 1918, NAM.
- ¹⁰⁴ Italian report, 13 January 1918, TNA.
- ¹⁰⁵ Letter on the Italian situation, 2 January 1918, CAB 24/37/69, TNA.
- ¹⁰⁶ Impressions of Lieutenant-Colonel C.N. Buzzard, October-November 1917, TNA.
- ¹⁰⁷ Plumer to Robertson, 21 January 1918, 8/3/47, Robertson Papers, LHCMA.
- ¹⁰⁸ Memoir, n.d., Floyer-Acland Papers, IWM.
- ¹⁰⁹ Plumer to Robertson, 7 January 1918, CAB 24/38/56, TNA.
- ¹¹⁰ Italian report, 13 January 1918, TNA.
- ¹¹¹ Italian report, 13 January 1918, TNA.
- ¹¹² Quoted in K. Gieves, *Sir Eric Geddes: Business and Government in War and Peace*, Manchester, 1989, 32.
- ¹¹³ S. Liddle, The past as prologue: assessing theories of future warfare, *Security Studies* 8 (1998) 5.